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UNITED STATES DISTRICT COURT

DISTRICT OF HAWAII

LUIS SANCHO,	)	
WALTER L. WAGNER,	)	Civil No. 08-00136-HG-KSC
	)	
Plaintiffs,	)	<b>FEDERAL DEFENDANTS'</b>
	)	<b>DECLARATION OF BRUCE P.</b>
	)	<b>STRAUSS IN SUPPORT OF</b>
v.	)	<b>SEPTEMBER 5, 2008 RESPONSE IN</b>
	)	<b>OPPOSITION TO PLAINTIFF'S</b>
UNITED STATES DEPARTMENT	)	<b>AUGUST 5, 2008 MOTION FOR A</b>
OF ENERGY, <i>et al.</i> ,	)	<b>DEFAULT JUDGEMENT AND</b>
	)	<b>PERMANENT INJUNCTION</b>
Defendants.	)	<b>AGAINST CERN [DKT. NO. 29]</b>
	)	

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I, Bruce P. Strauss, hereby declare as follows:

1. I am a Program Manager in the Office of High Energy Physics, Office of Science, U.S. Department of Energy (“DOE”). I have submitted two previous declarations in this matter on June 24, 2008, Dkt. No. 20, and on August 29, 2008, Dkt. No. 66. Those declarations provide my background, responsibilities, education, publications, experience, and expertise (see June 24, 2008 Strauss Decl., Dkt. No. 20 ¶¶ 1-2 and attachments thereto, and August 29, 2008 Strauss Decl., Dkt. No. 66 ¶¶ 1-5).

2. As stated in my August 29 declaration, the first two sentences of the LSAG report state:

“The safety of collisions at the Large Hadron Collider (LHC) was studied in 2003 by the LHC Safety Study Group, who concluded that they presented no danger. Here we review their 2003 analysis in light of additional experimental results and theoretical understandings, which enable us to confirm, update and extend the conclusions of the LHC Safety Study Group.”

My second declaration points out that the LSAG report extended and updated the arguments in favor of LHC safety with “empirical evidence gleaned from astronomical observations and additional detailed calculations” Id. This additional

work was peer-reviewed and published in a scholarly physics journal. S. Giddings et al. “Astrophysical implications of hypothetical stable TeV-scale black holes”, *Physical Review D* 78, 035009-1 (2008) (Attachment 9 to August 29 Strauss Declaration).

On August 10, 2008, an article titled “On the potential catastrophic risk from metastable quantum-black holes produced at particles colliders” was posted by R. Plaga at [http://arxiv.org/PS\\_cache/arxiv/pdf/0808/0808.1415v1.pdf](http://arxiv.org/PS_cache/arxiv/pdf/0808/0808.1415v1.pdf) (last visited 9/5/2008) (hereinafter “Plaga paper”). This article questions some of the conclusions of GM. However, a publication titled “Comments on claimed risk from metastable black holes” [http://arxiv.org/PS\\_cache/arxiv/pdf/0808/0808.4087v1.pdf](http://arxiv.org/PS_cache/arxiv/pdf/0808/0808.4087v1.pdf) (last visited 9/5/2008) rebuts the recent arguments of R. Plaga. In this rebuttal, Giddings et al. point out that Plaga made an error by the “inconsistent application” of a mathematical formula in Plaga’s paper. Giddings et al. also point out that Plaga has “both misquoted our paper, and selectively quoted from the available literature”. Giddings et al. closes by stating:

“We conclude that the conclusions of [GM] on this subject, as stated there and as referred to in the LHC safety assessment report, remain robust.”

I and other scientists within DOE's Office of High Energy Physics have reviewed the Plaga paper. In analyzing the statements in that work, we have found that Plaga's conclusions are flawed as pointed out by Giddings et al.

3. In my two previous declarations and in this declaration I have referred to the 2008 LSAG Report. This report, which concludes:

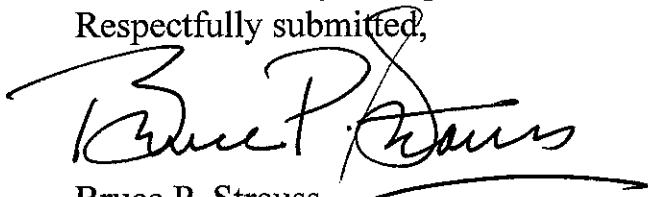
"There is no basis for any concerns about the consequences of new particles or forms of matter that could possibly be produced at the LHC",

was published today September 5, 2008 in a peer-reviewed scholarly physics journal ("Review of the safety of LHC collisions", Journal of Physics G: Nuclear and Particle Physics **35** (2008) 1150004) .

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 5<sup>th</sup> day of September 2008.

Respectfully submitted,



Bruce P. Strauss